THE AVR BURN-IN PROCESS (APPENDIX A)

1. Provide an EEPROM/FLASH Programmer and software for EEPROM/FLASH burn-in named "ATMEL AVR ISP V2.65" available from "ATMEL".

1.1 Connect the flash-programmer cable from LPT-1 to the test installation Connector Jx.

1.2 Burn-in program.

1.2.1 Put on the 12v power supply.

1.2.2. Activate the burn-in software (by double clicking on "ATMEL AVR ISP").

1.2.3 Activate in the "Project" menu the menu "New Project".

1.2.4 A window will appear by the name of "Devices Supported" choose the component which appears in the list as "AT90S/LS8535" and click on "OK" to confirm.

1.2.5. In the file "Manager" code in a short text in the windows for "Title" and "Project ID."

1.2.6 Go over to the file "Security and Fuses" and mark "V" next to the option "FSTR".

1.2.7. Go over to the window "Program Memory", and choose the sub-menu "Load" from the menu "File." Choose the file "jmp_1_10.hex" (Appendix A) stored in the appended CD-ROM and press OK to confirm.

1.2.8. A message will appear on the screen "File load was a success!" and press "OK" for confirmation.

1.2.9. Choose the sub-menu "Auto-Program Options" from the "Program" menu.

1.2.10. A window will appear "Auto-Program Options"- choose the following options:

.Reload Files

.Erase Device

.Program Device

.Verify Device

Do not mark the other options (if there is a mark next to them, it should be removed) and then press "OK" to confirm.

1.3   Choose the sub-menu "Auto-Program" from the menu "Program" (Or press on F5).

THE MCU BURN-IN PROCESS (APPENDIX B)

1.   Provide an EEPROM/FLASH Programmer and software for EEPROM/FLASH burn-in named "Prog17z programmer" available from "P&E Microcomputer Systems."

1.1 Connect the flash programmer to the parallel outlet of the PC (LPT1).

1.2 Connect to the 12 V DC circuit.

1.3 Connect the Jumper to the connectors JP3 and J6.

1.4 Connect the flash programmer to the JP1 connect such that the red wire is directed towards the processor.

1.5 Run the burn-in software "Prog12Z.EXE" supplied by P&E Microcomputer Systems from the desktop.

1.6 Now a window will be opened entitled Specify Programming Algorithm. Mark the file "Am400trw.12p" supplied by P&E Microcomputer Systems and press on the "Open" key.

1.7 Choose the option "EM – Erase Module" and double click on it.

1.8 Verify that the line "Erasing – Module could not be erased" appears in the window "Status Window."

1.9 Choose the option "Show Module –SM and double click on it.

1.10 Choose the address C000, verify that all the cells are erased (value FF), likewise verify that address FFFE are erased (value FF).

1.11 Close the window "Memory Window 1."

1.12 Choose the option SS – Specify S Record" and double click on it and choose the file "Mcu_1_09.S19" (Appendix B) in the appended CD-ROM and press on the "Open" key.

1.13 Choose the Option "Program Module – PM" and double click on it.

1.14 At the end of the burn-in, choose the option "VM – Verify Module" and double click on it.

1.15 Choose the option "SM – Show Module" and double click on it.

1.16 Check the content of the cells in the address C000, and confirm that the following sequence "C000: CF 09 50 16" appears.

1.17 Check the contents of the cells at the address FFFE and verify that the following sequence "FFFE: C0 00" appears.

1.18 Disconnect the voltage - power supply from the circuit.

1.19 Disconnect the jumpers J6, JP3 and the connector JP1.

1.20 Connect the two-colored LED to the JA1 connector to pins 1 and 2.

THE DATA SEAL BURN-IN PROCESS (APPENDIX C)

1.0   Provide an EEPROM/FLASH Programmer and software for EEPROM/FLASH burn-in named "ICP-01" available from "Soft Log"

1.1 Verify that the flash programmer "ICP-01" is connected to the Hi-G-Tek test installation available from Hi-G-Tek via the PC connector.

1.11 Switch on the Hi-G-Tek test installation.

1.2 Activate the software "ICP.exe" available from Soft Log.

1.3 Load up the software "Main_pr.hex" (Appendix C) stored in the appended CD-ROM.

1.4 Confirm the following parameters setup.

1.4.1   OSC: HS

1.4.2   WDT: ON

1.4.3   PWRT: ON

1.4.4   BOD: OFF

1.4.5   CP: All

1.4.6   DEB: OFF

1.4.7   WRT: ON

1.4.8   CPD: OFF

1.4.9   LVR: OFF

1.5 Press on the command "RUN" in the tools toolbar.

1.6 Press on the key "Program".

1.7 Verify that at the end of the burn-in you receive the message "SUCCESS".

Press any key...

1.8 If the message in Section 1.7 does not appear, repeat sections 1.5-1.7.

5   It is appreciated that the software components of the present invention may, if desired, be implemented in ROM (read-only memory) form. The software components may, generally, be implemented in hardware, if desired, using conventional techniques.

It is appreciated that the particular embodiment implemented by the Appendix is intended only to provide an extremely detailed disclosure of the present invention and is not intended to be limiting.

10   It is appreciated that various features of the invention which are, for clarity, described in the contexts of separate embodiments may also be provided in combination in a single embodiment. Conversely, various features of the invention which are, for brevity, described in the context of a single embodiment may also be provided separately or in any suitable subcombination.

15   It will be appreciated by persons skilled in the art that the present invention is not limited by what has been particularly shown and described hereinabove. Rather the scope of the present invention includes both combinations and subcombinations of the various features described hereinabove as well as variations and modifications which would occur to persons skilled in the art upon reading the specification and which are not in the prior art.

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